

Please amend claims 1, 12 and 18-23 as follows:

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1. (Amended) A flash-based unit for providing code to be executed by an external processor that is in communication with the flash-based unit by a bus, the flash-based unit comprising:

- (a) a flash memory for storing the code to be executed, said flash memory being of a type such that the code cannot be executed in place from said flash memory;
- (b) a volatile memory component for receiving at least a portion of the code to be executed, such that at least said portion of the code is executed by the external processor from said volatile memory component; and
- (c) a logic, separate from the external processor, for receiving a command to move said at least portion of the code from said flash memory to said volatile memory component..

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12. (Amended) A system for executing code from a restricted non-volatile memory, the restricted non-volatile memory being characterized in that code cannot be directly executed from the restricted non-volatile memory, the system comprising:

- (a) a CPU for executing the code;
- (b) a volatile memory component in direct communication with the restricted non-volatile memory for holding at least a portion of the code to be executed, said at least a portion of the code being transferred from the restricted non-volatile memory, such that said

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Sub B1 CPU executes said at least a portion of the code from said volatile memory component; and

- (c) a logic, separate from said CPU, for receiving a command to move said at least portion of the code from the restricted non-volatile memory to said volatile memory component.

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A3 18. (Amended) A system for executing code, comprising:

- (a) a flash-based unit for storing the code to be executed, said flash-based unit comprising a flash memory of a restricted type, being characterized in that the code cannot be directly executed from said flash memory, and a volatile memory component for receiving a portion of the code to be executed;
- (b) a processor for executing the code, said processor receiving at least said portion of the code from said volatile memory component; and
- (c) a logic, separate from said processor, for receiving a command to move said portion of the code from said flash memory to said volatile memory component;

wherein an additional memory component is not required for executing the code by said processor.

19. (Amended) A method for booting a system, the system featuring a processor for executing boot code, the method comprising:

providing a flash-based unit in the system for storing the boot code to be executed, said flash-based unit comprising a flash memory of a restricted type, being characterized in that code cannot be directly executed from said flash memory, and a

volatile memory component for receiving a portion of the boot code to be executed,
said portion of the boot code being for basic initialization of the system;

sending a busy signal to said processor;

transferring said portion of the boot code to said volatile memory component;

removing said busy signal; and

executing said portion of the boot code by said processor to boot the system.

20. (Amended) A flash-based unit for providing code to be executed by an external processor, consisting essentially of:

- (a) a flash memory for storing the code to be executed, said flash memory being of a type such that the code cannot be executed in place from said flash memory,
- (b) a volatile memory component for receiving at least a portion of the code to be executed, such that at least said portion of the code is executed by the external processor from said volatile memory component; and
- (c) a logic, separate from the external processor, for receiving a command to move said at least portion of the code from said flash memory to said volatile memory component.

21. (Amended) A flash-based unit for providing code to be executed by an external processor, comprising:

- (a) a flash memory for storing the code to be executed, said flash memory being of a type such that the external processor cannot read the code to be executed directly from said flash memory;

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- (b) a volatile memory component for receiving at least a portion of the code to be executed, such that at least said portion of the code is executed by the external processor from said volatile memory component; and
 - (c) a logic, separate from the external processor, for receiving a command to move said at least portion of the code from said flash memory to said volatile memory component.

22. (Amended) A method for booting a system, the system featuring a processor for executing boot code, the method comprising:

providing a flash-based unit in the system for storing the boot code to be executed, said flash-based unit comprising a flash memory of a restricted type, being characterized in that code cannot be directly executed from said flash memory, and a volatile memory component for receiving a portion of the boot code to be executed;

transferring a first portion of the boot code to said volatile memory component, said first portion of the boot code being for basic initialization of the system and containing a command for copying a second portion of the code; and

executing said first portion of the boot code by said processor to boot the system.

23. (Amended) The method of claim 22, further comprising the step of:

transferring a second portion of the code to said volatile memory component for booting the system.

Please add new claims 24-28 as follows:

24. (New) A flash-based unit for providing boot code to be executed by an external processor, comprising:

- (a) a flash memory for storing the boot code to be executed, said flash memory being of a type such that the boot code cannot be executed in place from said flash memory; and
- (b) a volatile memory component for receiving at least a portion of the boot code to be executed, such that at least said portion of the boot code is executed by the external processor from said volatile memory component, said at least portion of the boot code being only sufficient for basic initialization of a system that includes the external processor, said volatile memory component being only large enough to store said at least portion of the boot code.

25. (New) A system for executing boot code from a restricted non-volatile memory, the restricted non-volatile memory being characterized in that code cannot be directly executed from the restricted non-volatile memory, the system comprising:

- (a) a CPU for executing the boot code; and
- (b) a volatile memory component in direct communication with the restricted non-volatile memory for holding at least a portion of the boot code to be executed, said at least portion of the boot code being transferred from the restricted non-volatile memory, such that said CPU executes said at least portion of the boot code from said volatile memory component, said at least portion of the boot code being only

sufficient for basic initialization of the system, said volatile memory component being only large enough to store said at least portion of the boot code.

26. (New) A system for executing boot code, comprising:

- (a) a flash-based unit for storing the boot code to be executed, said flash-based unit comprising a flash memory of a restricted type, being characterized in that the boot code cannot be directly executed from said flash memory, and a volatile memory component for receiving a portion of the boot code to be executed, said portion of the boot code being only sufficient for basic initialization of the system, said volatile memory component being only large enough to store said at least portion of the boot code; and
- (b) a processor for executing the boot code, said processor receiving at least said portion of the boot code from said volatile memory component;

wherein an additional memory component is not required for executing the boot code by said processor.

27. (New) A flash-based unit for providing boot code to be executed by an external processor, consisting essentially of:

- (a) a flash memory for storing the boot code to be executed, said flash memory being of a type such that the boot code cannot be executed in place from said flash memory, and

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- (b) a volatile memory component for receiving at least a portion of the boot code to be executed, such that at least said portion of the boot code is executed by the external processor from said volatile memory component, said at least portion of the boot code being only sufficient for basic initialization of a system that includes the external processor, said volatile memory component being only large enough to store said at least portion of the boot code.

28. (New) A flash-based unit for providing boot code to be executed by an external processor, comprising:

- (a) a flash memory for storing the boot code to be executed, said flash memory being of a type such that the external processor cannot read the boot code to be executed directly from said flash memory; and
- (b) a volatile memory component for receiving at least a portion of the boot code to be executed, such that at least said portion of the boot code is executed by the external processor from said volatile memory component, said at least portion of the boot code being only sufficient for basic initialization of a system that includes the external processor, said volatile memory component being only large enough to store said at least portion of the boot code.

A marked-up version of the changes made to the specification and claims by the current amendment is attached, with the header "VERSION WITH MARKINGS TO SHOW CHANGES MADE".